

## Abstract

A method to detect invalid polygons that are inputted by users using  
5 a graphical user-interface is presented. The method selects pairs of lines  
that are used to define the polygon and tests to determine if the lines  
crossover. If there are no crossovers, then the polygon is a valid polygon. If  
there is a pair of lines that do crossover one another, then the polygon is an  
invalid polygon. Such a method is useful in teaching polygons and their  
10 properties to novices and students.